

Requirements:

1) Attend all Labs and Arrive on Time

A missed lab is cause for failure in the class. The only excuses for a missed lab are health reasons or a death in the family. Lab safety goggles are mandatory at all times; lab coats are optional but proper attire is required (rules will be handed out at lab check-in).

2) Come Prepared

You must print out all relevant material from the course website before your lab, and be prepared to answer questions from the TA and/or instructor about the experiment you are going to do. Students not adequately prepared will not be able to do the lab and asked to come back prepared next lab period. Note there is no lab manual; all relevant material will be placed on the course website.

3) Laboratory Notebooks

A bound lab notebook must be kept while doing the experiments and will be checked periodically by the instructor or TA. Carbon copy sheets are not required. An extensive writeup is not necessary, just notes that will help with your lab reports. The TA will check and initial the following before you begin each experiment: (i) a short abstract; (ii) details of toxicity of reagents to be used (consult Merck Index and/or MSDS databases, e.g. <http://www2.hazard.com/msds>).

4) Laboratory Reports

The written laboratory reports for Expt. 1 and 2 are due one week after completion of the experiment (see calendar handout). The reports should follow the format of a publication in the *Journal of the American Chemical Society* or *Inorganic Chemistry* (see recent papers in the journal as well as their guide to authors, <http://pubs.acs.org/journal/jacsat>). Reports should be thorough and guidelines will be provided. The last report, if written, is due by Monday, June 8th, 5 pm, no exceptions.

Approximate Laboratory Schedule (see calendar handout and 146B website for specific dates):

Week 1	Introduction: check-in, safety, course outline and rationale behind experiments.
Week 2 and 3	Expt. 1. Synthesis and Characterization of an Oxygen-Carrying Cobalt Complex which Mimics Hemoglobin: Introduction of Inorganic Synthetic Models of Biological Oxygen Carriers
Week 4	Expt. 2. Preparation of an Organometallic Complex with an Sn-Mn bond: Introduction to Organometallic Chemistry
Week 5 to 10	Expt. 3. Synthesis and Characterization of a Nanoporous Zeolite and its Application as a Catalyst: Introduction to Materials Chemistry